## **ABSTRACT**

The invention provides a data stream processing system applied for Direct Stream Digital technology (DSD). The system converts each original digital data streams processed by DSD into corresponding analog signals. The system comprises a combining module, a clock generating module, and a digital-to-analog converter (DAC). Based on a combining rule, the combining module generates data streams by combining two original digital data streams into one data stream. The clock-generating module generates a first clock signal to define a predetermined converting period for the data streams and a second clock signal to trigger a converting process for each digital data of the data streams. The DAC converts each digital data of each data streams into a plurality of corresponding analog signals, based on the first and the second clock signals.

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